AIRBORNE STRATEGIC COMMUNICATIONS ENGINEERING AND TEST FACILITY

The Airborne Strategic Communications Engineering and Test (ASCET) Facility, is the only large scale, wide spectrum, communications RDT&E and In-Service Engineering (ISE) capability specifically facility designed to support the National Command Authorities Global Command and Control Systems airborne resources. The ASCET facility is fully operational E-6 Mission Avionics System (MAS), comprised of VLF thru EHF radios and required C4 subsystem also supports T&E related to the acquisition of the future E-6B aircraft. The E-6 MAS is also used to provide ISE support to the Fleet E-6 Squadrons including tactical software IV&V. Because of the ASCET's Facilities strategic data collection capabilities, the Defense Information Systems Agency (DISA) relies upon this asset to perform a quality assurance function during Joint Chiefs of Staff (JCS) strategic communications exercises.

TAKE CHARGE AND MOVE OUT (TACAMO)

The capability for scripted scenario driven RF and baseband closed and open loop simulation and stimulation of strategic communication messages and commands was developed by the ASCET Team to effectively support both strategic and tactical

communications RDT&E teams, Fleet Engineering requirements and special joint military training evolutions. The major element of the Facilities SIM/STIM and data collection equipment is the TACAMO Digital Analysis System (TDAS), initially developed to support E-6 aircraft MAS upgrades. TDAS consists of a HP 9000 model 747i Workstation, Optical Disk and CD-ROM Drives, I/O and software. The Diagnostic Creation and Analysis (DCA) subsystem of TDAS allows the user to simulate and/or monitor message traffic to and/or from MAS.

The ASCET Facility is housed in a 6,700 square foot building, with an ample supply of conditioned 400Hz and 28 Vdc power. This ASCET Facility supports three "laboratories": the MAS lab, the Subsystems Verification lab, and the VLF Power Amplifier/Coupler lab. Currently, 7,000 square feet of laboratory space is being added. Upon completion of the facility expansion, ASCET will have a total of 13,700 square feet of floor space and three additional lab: the Systems Development and Integration Laboratory (SDIL), a TEMPEST cell, and the Design and Development Database Sub-facility (DADS). The ASCET Facility has been reconfigured to maintain pace with the joint Strategic Communications upgrades currently in progress including MILSTAR systems, GPS, improved time and frequency systems and crypto. The facility is constructed to accommodate easy access to the laboratories and facilitate rapid equipment reconfiguration. Located in close proximity to the NAS Patuxent River runways and operations center, it is served by the NAWCAD high speed information system and scientific data network systems.

The ASCET Facility represents a cost effective, flexible, rapidly reconfigurable, physically and electronically secure, wide spectrum facility with over $50,000,000 invested in equipment to support Strategic Communications concerning Joint Service RDT&E, E-6 Aircraft ISE, and Joint Service training.

For more information regarding this facility contact the ASCET Facility Team Leader at the Naval Air Warfare Center Aircraft Division, Patuxent River, MD, at (301) 342-1211 or DSN 342-4770.